

## Storm Data and Unusual Weather Phenomena - November 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>INDIANA, Northeast</b>				
<b>(IN-Z003) LA PORTE, (IN-Z004) ST. JOSEPH</b>				
	11/12/13 00:00 CST		0	Lake-Effect Snow
	11/12/13 13:00 CST		0	
<b>(IN-Z003) LA PORTE, (IN-Z004) ST. JOSEPH</b>				
	11/12/13 00:00 EST		0	Lake-Effect Snow
	11/12/13 13:00 EST		0	
<b>(IN-Z012) STARKE</b>				
	11/12/13 00:00 EST		0	Winter Weather
	11/12/13 13:00 EST		0	
An intense lake effect snow band set up over northwest Indiana during the morning hours of Nov 12th. Localized snowfall amounts as high as 9 inches were reported.				
<b>LA PORTE COUNTY --- 1.5 SSE MICHIGAN CITY ARPT [41.68, -86.81]</b>				
	11/17/13 12:36 CST		0	Thunderstorm Wind (EG 52 kt)
	11/17/13 12:37 CST		0	Source: Trained Spotter
A trained spotter estimated wind gusts to 60 mph with trees and power lines down in the area.				
<b>LA PORTE COUNTY --- 0.7 S MICHIGAN CITY [41.71, -86.90]</b>				
	11/17/13 13:37 CST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 13:38 CST		0	Source: Public
The public reported a two foot diameter tree was uprooted and fell onto a home.				
<b>LA PORTE COUNTY --- 0.7 S WESTVILLE [41.54, -86.90]</b>				
	11/17/13 13:37 CST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 13:38 CST		0	Source: Public
The public reported a large tree fell onto State Route 421.				
<b>PULASKI COUNTY --- 0.4 SE MEDARYVILLE [41.08, -86.89], 2.8 ENE DENHAM [41.17, -86.67]</b>				
	11/17/13 14:03 CST		0	Tornado (EF0, L: 13.18 mi , W: 100 yd)
	11/17/13 14:13 CST		0	Source: NWS Storm Survey
A survey of damage in northern Pulaski county by emergency management and NWS officials revealed damage consistent with a EF1 tornado. The tornado touched down just southwest of U.S. 421 and Delaware Street in Medaryville. Several large, healthy trees suffered damage ranging from broken limbs to trees being snapped at the base (DI: TS DOD: 4). The tornado exited the town and remained over mainly rural areas moving across harvested fields and occasionally impacting groves of trees or center pivot irrigation systems. A barn was completely destroyed (DI: SBO DOD: 8) on North County Road 1050 West. The tornado entered the town of Denham impacting a grain bin, which was moved off its foundation and then flattened. The tornado cause minor tree damage and then lifted just before crossing into Starke county. The maximum wind speed is estimated at 110 mph..				
<b>LA PORTE COUNTY --- 1.3 NNE WANATAH [41.45, -86.89]</b>				
	11/17/13 14:18 CST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 14:19 CST		0	Source: Trained Spotter
A trained spotter reported a one foot diameter branch blown down near the intersection of County Road 1100 South and US-421.				
<b>WHITE COUNTY --- 7.7 W BADGER GROVE [40.57, -87.10], 2.3 NNE BADGER GROVE [40.61, -86.93]</b>				
	11/17/13 14:43 EST		0	Tornado (EF2, L: 9.10 mi , W: 1200 yd)
	11/17/13 14:55 EST		0	Source: NWS Storm Survey

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
A survey of damage by NWS officials indicated that a tornado touched down in eastern Benton county and continued northeast into White county. Exact determination of maximum intensity was difficult due to vastly open country and lack of trees and other objects. The tornado moved into southwestern White county south of County Road 1200 South, where the garage door of a west facing pole barn was pushed in and some minor tree limb damage was noted. The tornado continued rapidly northeast and impacted a residence on 900 West where the chimney (above the roof) was knocked down with shingle damage noted to the home. In addition, a large propane tank and camper were rolled or pushed roughly 150 feet away with the camper being destroyed. The tornado moved into open fields where it remained for roughly four miles, crossing Interstate 65 between mile markers 188 and 190. The tornado briefly strengthened after crossing the interstate, snapping 10 18-24 inch diameter power poles (DI: ETL DOD: 4) at the ground along County Road 500 West, either side of State Route 18. A home on the intersection of these roads suffered minor window and roof damage. Just east of the intersection, a pole barn was destroyed (DI: SBO DOD: 8) with debris thrown upwards of three-quarters of a mile. The tornado finally lifted west of County Road 300 West and north of State Route 18. The tornado was on the ground for a combined distance of 12 miles from eastern Benton county into White county. A maximum width of roughly 1200 yards was determined with maximum wind speeds around 120 mph.				

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### WHITE COUNTY --- 2.0 SSW SMITHSON [40.69, -86.88], 5.3 W CHALMERS [40.67, -86.95]

11/17/13 14:51 EST	0	Tornado (EF0, L: 4.15 mi , W: 300 yd)
11/17/13 14:57 EST	0	Source: NWS Storm Survey

A NWS survey of damage revealed a tornado touched down in an open field 4 miles west of Chalmers, northwest of the intersection of County Road 600 South and 450 West. Tornado touched down in a field and moved northeast, crossing County Road 300 West, south of County Road 500 South where four 18 inch diameter power poles were snapped at the base (DI: ETL DOD: 4). The tornado then caused minor damage to siding and roofing at a home northeast of this location. A large pole barn in the same yard lost half of its roof, the barn next door to this residence was completely destroyed (DI: SBO DOD: 8) with debris from both locations being carried up to a mile to the northeast. Once final barn suffered minor roof damage before the tornado lifted two miles north of Chalmers east of County Road 75 West and south of County Road 350 S. Maximum wind speeds were estimated around 120 mph.

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### WHITE COUNTY --- 7.7 W BADGER GROVE [40.57, -87.10], 2.4 NNE BADGER GROVE [40.61, -86.93]

11/17/13 14:52 EST	0	Tornado (EF2, L: 9.23 mi , W: 900 yd)
11/17/13 15:01 EST	0	Source: NWS Storm Survey

A review of radar data and damage details near the southwestern White county tornado revealed a separate tornado occurred roughly 10 minutes behind the first tornado. The tornado touched down west of County Road 1100 West and north of the White/Tippecanoe county line where it impacted a farm, destroying two barns (one large and one small) with debris being thrown more than a half mile away from the location. In addition, several healthy pine trees lost branches with a few being snapped at the trunk and then launched or dragged several hundred feet to the east. The tornado moved northeast and impacted a residence on US 231, south of County Road 1200 South. The entire roof of a one story home (DI: FR12 DOD: 6) was removed and thrown northeast into a field. Two by four boards were driven into the field up to 250 yards away. The tornado eventually crossed Interstate 65 hitting yet another farm with extensive barn and shed damage on County Road 500 West, south of State Route 18. Power pole damage was noted in this area as well, but was not clear if this was from the prior tornado just to the north. Northeast of this location, it appears that the tornado quickly dissipated or became harder to detect based on the earlier damage. Maximum winds are estimated at 120 mph.

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### WHITE COUNTY --- 1.3 WSW CHALMERS [40.66, -86.87]

11/17/13 14:55 EST	0	Thunderstorm Wind (EG 60 kt)
11/17/13 15:00 EST	0	Source: Emergency Manager

Emergency management officials reported widespread wind damage across the southern part of the county, mainly from Brookston to Chalmers to the Cass county line.

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### WHITE COUNTY --- 0.5 W MONTICELLO [40.75, -86.76]

11/17/13 15:00 EST	0	Thunderstorm Wind (EG 60 kt)
11/17/13 15:01 EST	0	Source: Public

The public reported a tree was uprooted in Monticello.

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### WHITE COUNTY --- 3.7 NNW BURNETTSTVILLE [40.82, -86.59], 3.3 NNE IDAVILLE [40.81, -86.61]

11/17/13 15:07 EST	0	Tornado (EF1, L: 0.81 mi , W: 150 yd)
11/17/13 15:08 EST	0	Source: NWS Storm Survey

A survey of damage in northeastern White county revealed damage consistent with a brief EF1 touchdown. The tornado touched down in an open field northeast of the intersection of County Road 400 North and 1350 East before flipping 4 sections of a center pivot irrigation system. As the tornado moved northeast a trailer was impacted removing the roof and taking down half of the walls (DI: MHSW DOD: 4). A woman was in the trailer home at the time it hit but made it to the bathroom as it was falling apart and survived with no injury. Debris from the trailer was thrown north and northwest into an adjacent field. The tornado continued northeast into a grove of trees where it continued less than 50 feet before lifting one quarter mile southwest of the intersection of County Roads 500 North and 1450 East. The maximum wind speed is estimated at 100 mph.

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### ST. JOSEPH COUNTY --- 0.7 N SOUTH BEND [41.68, -86.25]

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	11/17/13 15:10 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:11 EST		0	Source: Trained Spotter
A trained spotter reported a 16 inch tree down onto an car.				
<b>ST. JOSEPH COUNTY --- 3.2 SSE SOUTH BEND [41.63, -86.22]</b>				
	11/17/13 15:10 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:11 EST		0	Source: Trained Spotter
A trained spotter reported a tree was uprooted and fell onto a house on the south side of the 4-H fairgrounds.				
<b>ST. JOSEPH COUNTY --- 0.5 E (SBN)MICHIANA ARPT S [41.70, -86.31]</b>				
	11/17/13 15:11 EST		0	Thunderstorm Wind (MG 59 kt)
	11/17/13 15:12 EST		0	Source: ASOS
A 68 mph wind gust was recorded by the automated weather sensor at the South Bend Regional Airport.				
<b>ST. JOSEPH COUNTY --- 0.7 N SOUTH BEND [41.68, -86.25]</b>				
	11/17/13 15:11 EST		0	Thunderstorm Wind (MG 57 kt)
	11/17/13 15:12 EST		0	Source: Trained Spotter
A trained spotter measure a 66 mph wind gust near the South Bend airport.				
<b>CASS COUNTY --- 1.4 WSW YOUNG AMERICA [40.56, -86.37], 0.5 NNE LINCOLN [40.63, -86.22]</b>				
	11/17/13 15:17 EST		0	Tornado (EF3, L: 9.38 mi , W: 100 yd)
	11/17/13 15:27 EST		0	Source: NWS Storm Survey
An extensive NWS damage survey indicated a tornado that briefly reached low end EF-3 intensity southeast of Lafayette continued through Tippecanoe county and crossed into Cass county just north of the intersection of County Road 1400 South and the Carroll/Cass county line. The tornado remained over mainly open fields until moving near a residence on County Road 150 East, south of 1250 South where a home had its chimney blown off and a barn on the property suffered a blown out wall. The tornado continued northeast and cause minor shingle damage to three homes on County Road 1250, west of County Road 300 East. A small barn was destroyed with debris thrown into an adjacent field. The tornado briefly intensified as it entered a grove of trees north of County Road 1200 South and west of 400 East where every tree for the first 100 feet was snapped five to ten feet above the base (DI: TH DOD: 4). The tornado remained over mainly open fields, occasionally causing minor tree damage until crossing US 35 north of County Road 1000 S where power poles were broken (DI: ETL DOD: 4). The tornado quickly lifted a few miles southwest of the Grissom Air Reserve Base. A maximum intensity of EF2 was reached while in Cass county, with estimated winds of 120 mph.				
<b>ST. JOSEPH COUNTY --- 0.9 SE MISHAWAKA [41.66, -86.16]</b>				
	11/17/13 15:18 EST		0	Thunderstorm Wind (MG 58 kt)
	11/17/13 15:19 EST		0	Source: Public
A measured wind gust of 67 mph was reported by the public.				
<b>ST. JOSEPH COUNTY --- 2.3 SSW MISHAWAKA [41.64, -86.19]</b>				
	11/17/13 15:19 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:20 EST		0	Source: Emergency Manager
Emergency management officials reported eight inch pine trees down on the east side of Marion High School.				
<b>CASS COUNTY --- 0.8 NW LOGANSPOUT MUNI ARPT [40.73, -86.39], 1.4 N LOGANSPOUT MUNI ARPT [40.74, -86.38]</b>				
	11/17/13 15:20 EST		0	Tornado (EF0, L: 1.13 mi , W: 150 yd)
	11/17/13 15:22 EST		0	Source: NWS Storm Survey
A survey of damage in the Logansport area indicated that a EF0 tornado touched down west of Logansport Bypass Road and north of County Road 250 South. The tornado moved northeast and did minor damage to the roof of a local warehouse before crossing the bypass. A home on West Clinton Street suffered complete loss of its roof from the tornado (DI: FR12 DOD: 4). However, impact occurred on a sun room that had structural issues and aided in the wind being able to lift the roof of the house. Minor tree damage was found along the remainder of the tornado track until it lifted northeast of the intersection of Lincoln and South Cicott Streets. The maximum wind speed was estimated at 85 mph.				
<b>CASS COUNTY --- 0.7 S GALVESTON [40.57, -86.18]</b>				
	11/17/13 15:23 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:24 EST		0	Source: Public

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The public reported the Bob Evans billboard sign was ripped in half by strong winds.				
<b>FULTON COUNTY --- 0.9 NW ROCHESTER [41.08, -86.23]</b>				
	11/17/13 15:24 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:25 EST		0	Source: Emergency Manager
Emergency management officials reported a 30 foot high pine tree snapped four feet above the base.				
<b>MIAMI COUNTY --- 0.9 NW BENNETTS [40.59, -86.11]</b>				
	11/17/13 15:26 EST		0	Thunderstorm Wind (EG 70 kt)
	11/17/13 15:27 EST		0	Source: Emergency Manager
Emergency management officials reported the McClures gas station awning was removed. Stop lights were ripped from their mounts.				
<b>WHITLEY COUNTY --- 1.5 SSE ETNA [41.25, -85.56]</b>				
	11/17/13 15:27 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:28 EST		0	Source: Emergency Manager
Emergency management officials reported a tree down across a road with power lines down.				
<b>WHITLEY COUNTY --- 0.9 SW COLUMBIA CITY [41.16, -85.49]</b>				
	11/17/13 15:28 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:29 EST		0	Source: Emergency Manager
Emergency management officials reported numerous trees down across the county, many onto roadways. A few barns also suffered roof damage.				
<b>MARSHALL COUNTY --- ARGOS [41.23, -86.25]</b>				
	11/17/13 15:29 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:30 EST		0	Source: Emergency Manager
Emergency management officials reported trees was blown down across Yearick and 1st Streets.				
<b>BLACKFORD COUNTY --- HARTFORD CITY [40.45, -85.37]</b>				
	11/17/13 15:30 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:31 EST		0	Source: Emergency Manager
Emergency management officials reported trees and power lines down across the county. No significant damage was reported.				
<b>MIAMI COUNTY --- 0.7 N (GUS)GRISSOM AFB PER [40.66, -86.15]</b>				
	11/17/13 15:30 EST		0	Thunderstorm Wind (MG 73 kt)
	11/17/13 15:31 EST		0	Source: AWOS
A 84 mph wind gust was recorded by automated weather equipment at the Grissom Air Reserve Base.				
<b>MIAMI COUNTY --- 1.8 NW BUNKER HILL [40.69, -86.12], 2.7 NNE BUNKER HILL [40.70, -86.07]</b>				
	11/17/13 15:30 EST		0	Tornado (EF1, L: 2.87 mi , W: 250 yd)
	11/17/13 15:33 EST		0	Source: NWS Storm Survey
A survey of damage by NWS and emergency management officials indicated a tornado occurred northeast of the Grissom Air Reserve base. The tornado touched down in a field southeast of the intersection of US 31 and County Road 500 South and then took the roof off of a hog barn. The tornado continued to travel east where it hit another hog barn and took off the roof and collapsed the walls (DI: SBO DOD: 6). One piece of wall (estimated near 1/2 ton) was thrown back into the eastern side of the building and smashed the exhaust system. The tornado then turned NE and did extensive tree damage to a grove of trees on county Road 50 West before hitting a trailer home where half of the walls were collapsed (DI: MHSW DOD:4) and insulation and pieces of debris were strewn out for a half mile to the NE. The tornado then lifted about a third of a mile northeast of the trailer. Maximum winds are estimated around 110 mph. Although the distance between the 2 points was around 2.6 miles, a variable track caused the actual distance to be closer to 2.9 miles long.				
<b>KOSCIUSKO COUNTY --- 0.7 N BARBEE [41.31, -85.72]</b>				
	11/17/13 15:32 EST		0	Thunderstorm Wind (MG 55 kt)
	11/17/13 15:33 EST		0	Source: NWS Employee
An off duty NWS employee reported extensive tree damage in North Webster, with several trees onto roadways.				

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<b>MIAMI COUNTY --- PERU [40.75, -86.07]</b>				
	11/17/13 15:35 EST		0	Thunderstorm Wind (EG 52 kt)
	11/17/13 15:36 EST		0	Source: Emergency Manager
Emergency management officials estimated wind gusts of at least 60 mph with multiple power outages in the area.				
<b>KOSCIUSKO COUNTY --- 1.8 NNW BURKET [41.17, -85.99], 1.3 WNW PALESTINE [41.19, -85.97]</b>				
	11/17/13 15:38 EST		0	Tornado (EF1, L: 1.05 mi , W: 250 yd)
	11/17/13 15:40 EST		0	Source: NWS Storm Survey
A survey of damage east of Mentone by a NWS Survey team revealed that a EF1 tornado produced damage along a roughly 1 mile path. Touchdown occurred southwest of the intersection of State Route 25 and County Road 800 West with the tornado quickly moving northeast and impacting a residence and barn on the southeast corner of the same intersection. A few small hardwood trees were snapped with the adjacent residence suffering minor shingle damage. An adjacent barn was shifted off its foundation with the north facing doors and wall buckled. As the tornado crossed State Route 25 it clipped a residence, causing roughly 75 percent of the roof and trusses to be ripped off and thrown to the north northwest about 250 yards. Power poles on the north side of the road were also blown down. As the tornado continued northeast it cause widespread tree damage in a wooded area, as well as minor structural damage to a home along South Tinkey Road. The tornado lifted shortly after this point, southeast of the intersection of Tinkey and Shilling Roads. Maximum wind speeds with the tornado are estimated at 100 mph.				
<b>ELKHART COUNTY --- 0.5 W ELKHART [41.68, -85.98]</b>				
	11/17/13 15:40 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:41 EST		0	Source: Public
The public reported multiple trees down in the city.				
<b>ELKHART COUNTY --- 0.7 S WAKARUSA [41.52, -86.02]</b>				
	11/17/13 15:42 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:43 EST		0	Source: Public
The public reported trees down, as well as silo and outbuilding damage on County Road 1 near Wakarusa.				
<b>GRANT COUNTY --- 1.4 SSW MIER [40.55, -85.84], 4.6 ENE JALAPA [40.65, -85.67]</b>				
	11/17/13 15:42 EST		0	Tornado (EF2, L: 11.62 mi , W: 700 yd)
	11/17/13 15:52 EST		0	Source: NWS Storm Survey
A NWS survey of damage in Grant county indicated a tornado impacted a several mile long path. The tornado touched down on County Road 00 South, west of County Road 900 West where a hog barn suffered some roof damage. The tornado moved quickly northeast and intensified where it caused damage to two residences near the intersection of County Roads 300 North and 600 West. A large portion of the front wall of a one story home to collapse with subsequent removal of adjacent roof. A nearby home lost its entire roof (DI: MHSW DOD: 6). The tornado continued to intensify further approaching EF2 intensity as it cause extensive damage to a garage with the roof being removed and walls pushed down. Projectiles from the garage were found in the roof of the residence. EF2 intensity was reached around the intersection of County Road 325 West and Frances/Slocum Road where the top of a two story home was nearly removed (DI: FR12 DOD: 6). The tornado slowly weakened the remainder of its track impacting other residences with decreasing amounts and intensity of roof damage. Trees also suffered varying degrees of damage. The tornado cross briefly into Wabash county west of Grant County Road 00 West/Wabash County Road 600 East. The tornado was on the ground for over 11.5 miles with winds reaching a maximum intensity of around 125 mph.				
<b>WABASH COUNTY --- WABASH [40.80, -85.82]</b>				
	11/17/13 15:42 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:43 EST		0	Source: Public
Damage was observed to cars and homes in the city. A home suffered partial roof damage with windows being blown out of a second story floor.				
<b>WABASH COUNTY --- 3.9 NE DISKO [41.04, -85.89], 4.6 NE DISKO [41.04, -85.88]</b>				
	11/17/13 15:43 EST		0	Tornado (EF2, L: 0.67 mi , W: 150 yd)
	11/17/13 15:44 EST		0	Source: NWS Storm Survey
A survey of damage in Wabash county by a NWS Survey team revealed that a tornado that would eventually reach EF2 intensity produced damage starting just south of the Wabash/Kosciusko county line just west of State Route 15. The tornado destroyed a small shed (DI: SBO DOD:6) and caused minor roof damage to a residence before going over open fields. The tornado crossed into Kosciusko county approximately 4 tenths of a mile east of State Route 15, where it continued for an additional 3.5 miles. While in Wabash county, the tornado produced maximum wind speeds of around 85 mph (EF0) in Wabash county and was on the ground for about 7 tenths of a mile.				

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<b>ELKHART COUNTY --- 1.4 N WAKARUSA [41.55, -86.02]</b>				
	11/17/13 15:44 EST		0	Thunderstorm Wind (EG 50 kt)
	11/17/13 15:45 EST		0	Source: Public
The public reported a shed was thrown into a tree with a swing-set being blown over.				
<b>KOSCIUSKO COUNTY --- 1.9 S SILVER LAKE [41.04, -85.88], 2.4 ENE SILVER LAKE [41.08, -85.83]</b>				
	11/17/13 15:44 EST		0	Tornado (EF2, L: 3.47 mi , W: 150 yd)
	11/17/13 15:48 EST		0	Source: NWS Storm Survey
A survey of damage in Wabash and Kosciusko counties by a NWS Survey team revealed that a tornado touched down just south of the Wabash/Kosciusko county line, west of State Route 15. The tornado crossed into Kosciusko county approximately 4 tenths of a mile east of State Route 15 and continued to the northeast over mainly open fields, occasionally causing tree damage until it hit a farm on CR 300 W approximately half a mile south of SR 14. At this location there were 4 cattle barns completely destroyed with their contents thrown east-northeast into the field (DI:SBO DOD: 8). There were 600 cattle at the farm at the time the tornado hit and 10 of them were killed with another 10 injured. There was a two story home on this property that had part of the second story roof removed and the second story bedroom shifted as the east wall buckled outward. The debris field from this tornado continued to the NE and power poles were snapped at the base along SR 14. The tornado dissipated shortly after this as it crossed S County Farm Rd. The total path length across both counties was around 4.2 miles with a maximum estimated wind speed of 115 mph.				
<b>GRANT COUNTY --- 0.7 N SWAYZEE [40.51, -85.83]</b>				
	11/17/13 15:47 EST		0	Thunderstorm Wind (EG 74 kt)
	11/17/13 15:48 EST		0	Source: Trained Spotter
A trained spotter estimated wind gusts to 85 mph along with quarter size hail.				
<b>WABASH COUNTY --- 1.5 NNE WABASH [40.82, -85.81]</b>				
	11/17/13 15:48 EST		0	Thunderstorm Wind (MG 60 kt)
	11/17/13 15:49 EST		0	Source: Mesonet
A mesonet site recorded at 69 mph wind gust.				
<b>KOSCIUSKO COUNTY --- 0.5 E PIERCETON [41.20, -85.71]</b>				
	11/17/13 15:50 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:51 EST		0	Source: State Official
A state official reported a tree down south of Pierceton.				
<b>GRANT COUNTY --- 0.9 SE SHADY HILLS [40.56, -85.66]</b>				
	11/17/13 15:51 EST		0	Thunderstorm Wind (EG 70 kt)
	11/17/13 15:52 EST		0	Source: Trained Spotter
A trained spotter reported 50 to 60 trees down across the city. A semi was overturned near Meyer Road in southern Marion. The armory on State Route 18 suffered roof damage.				
<b>WABASH COUNTY --- 3.0 ESE LA FONTAINE [40.65, -85.67], 3.0 ESE LA FONTAINE [40.65, -85.67]</b>				
	11/17/13 15:52 EST		0	Tornado (EF2, L: 0.13 mi , W: 700 yd)
	11/17/13 15:53 EST		0	Source: NWS Storm Survey
A tornado which produced EF2 damage in Grant county briefly entered southern Wabash county, causing damage some minor damage to the roof and metal panels on a pole barn before quickly dissipating. The tornado intensity in Wabash county was on the lower end of EF0 and lasted roughly a minute at best.				
<b>ELKHART COUNTY --- NEW PARIS [41.50, -85.83]</b>				
	11/17/13 15:53 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:54 EST		0	Source: Amateur Radio
Amateur radio operators reported a 10 to 12 inch diameter tree was blown down across the road.				
<b>KOSCIUSKO COUNTY --- 1.9 SSW OSWEGO [41.30, -85.80], 0.2 SW OSWEGO [41.32, -85.78]</b>				
	11/17/13 15:54 EST		0	Tornado (EF1, L: 1.65 mi , W: 275 yd)
	11/17/13 15:56 EST		0	Source: NWS Storm Survey

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A survey of damage southwest of Oswego by a NWS Survey team revealed that a EF1 tornado produced damage along a roughly 1.7 mile path. Touchdown occurred in a harvested field southwest of the intersection of County Roads 450 North and 250 East. Several segments of a center pivot were flipped in this area. The tornado continued northeast crossing County Road 450 North, severely damaging 7 power poles, which were either snapped or bent at more than a 45 degree angle. One pole had 3 large transformers for the center pivot on it, with these being pushed on to the roadway. The tornado then impacted the Pines subdivision, northeast of 450 North and 250 East. Two to three dozen healthy pine trees between 30 and 50 feet tall were snapped or uprooted (DI: TS DOD: 4). One house was impacted on both sides with the roof being penetrated. Two vehicles had trees fall onto them, crushing them. The tornado moved through the remainder of the subdivision and adjacent properties with varying degrees of mainly roof and tree damage. The last noted damage involved a home on County Road 300 East, just south of Rader Road where moderate roof damage occurred and a narrow path of trees snapped in an adjacent wooded area. The tornado lifted shortly after this point prior to crossing Armstrong Road. Maximum wind speeds with the tornado are estimated at 95 mph.				

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<b>GRANT COUNTY --- 0.8 SSE ROSEBURG [40.51, -85.72], 0.8 SSE ROSEBURG [40.51, -85.72]</b>				
	11/17/13 15:55 EST		0	Tornado (EF0, L: 0.04 mi , W: 20 yd)
	11/17/13 15:56 EST		0	Source: NWS Storm Survey

A survey of damage in west central Grant county revealed damage consistent with a brief EF0 touchdown. The tornado touched down a quarter mile east of the intersection of County Roads 300 South and 300 West. A storage shed on the property sustained some roof damage (DI: SBO DOD: 2) with extensive tree damage also noted. The tornado quickly lifted after crossing County Road 300 South. The maximum wind speed is estimated at 80 mph.

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<b>GRANT COUNTY --- 0.9 NE GAS CITY [40.49, -85.61]</b>				
	11/17/13 15:55 EST		0	Thunderstorm Wind (EG 65 kt)
	11/17/13 15:56 EST		0	Source: Public

A 50 foot section of wall and roof collapsed at the Dollar General Warehouse.

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<b>GRANT COUNTY --- 0.9 SE SHADY HILLS [40.56, -85.66]</b>				
	11/17/13 15:55 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:56 EST		0	Source: Trained Spotter

Trained spotters reported many trees and power lines down throughout the county.

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<b>GRANT COUNTY --- 1.3 ENE MARION [40.56, -85.56]</b>				
	11/17/13 15:55 EST		0	Thunderstorm Wind (EG 65 kt)
	11/17/13 15:56 EST		0	Source: State Official

County officials reported the Summit Village Trailer park was heavily damaged, with some mobile homes on top of each other.

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<b>KOSCIUSKO COUNTY --- 1.4 N OSWEGO [41.34, -85.78]</b>				
	11/17/13 15:55 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:56 EST		0	Source: NWS Employee

A off duty NWS employee reported a 12 inch diameter tree was twisted and split on the north side of Lake Tippecanoe. Other tree damage was found in the general area.

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<b>KOSCIUSKO COUNTY --- 1.5 NE OSWEGO [41.34, -85.76]</b>				
	11/17/13 15:55 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:56 EST		0	Source: NWS Employee

Several pine trees and other varieties of trees were snapped just south of the Lake Tippecanoe Country Club.

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<b>KOSCIUSKO COUNTY --- 2.5 NE OSWEGO [41.35, -85.75]</b>				
	11/17/13 15:55 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:56 EST		0	Source: NWS Employee

Half of the east facing side of a older barn roof was blown off into an field to the north. A center pivot irrigation system in the same field has 2 segments flipped.

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<b>HUNTINGTON COUNTY --- 2.3 SSE MAKIN [40.94, -85.56]</b>				
	11/17/13 15:57 EST		40K	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:58 EST		0	Source: Emergency Manager

Emergency management officials reported a pole barn/garage was completely destroyed with two cars inside damaged.

## Storm Data and Unusual Weather Phenomena - November 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>HUNTINGTON COUNTY --- 1.0 W HUNTINGTON [40.88, -85.50]</b>				
	11/17/13 15:59 EST		0	Thunderstorm Wind (EG 50 kt)
	11/17/13 16:00 EST		0	Source: Public
The public reported several tree limbs down throughout the city.				
<b>HUNTINGTON COUNTY --- 1.5 SSW MARKLE [40.81, -85.34]</b>				
	11/17/13 16:02 EST		0	Thunderstorm Wind (MG 70 kt)
	11/17/13 16:03 EST		0	Source: Trained Spotter
A trained spotter measured a 81 mph wind gust. Several trees and tree limbs were blown down in the area with minor structural damage to homes.				
<b>HUNTINGTON COUNTY --- 2.7 NNE ROANOKE [41.00, -85.35]</b>				
	11/17/13 16:02 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 16:03 EST		0	Source: Trained Spotter
A trained spotter reported severe damage to a barn, with a large maple tree split on County Road 1200 North in Roanoke.				
<b>NOBLE COUNTY --- KIMMELL [41.40, -85.55]</b>				
	11/17/13 16:02 EST		0	Thunderstorm Wind (EG 61 kt)
	11/17/13 16:03 EST		0	Source: Public
The public estimated 60 to 70 mph thunderstorm wind gusts.				
<b>WHITLEY COUNTY --- 2.9 SE RABER [41.05, -85.39]</b>				
	11/17/13 16:04 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 16:05 EST		0	Source: Emergency Manager
Emergency management officials reported half of a barn roof was torn off.				
<b>HUNTINGTON COUNTY --- 1.5 SSW MARKLE [40.81, -85.34]</b>				
	11/17/13 16:07 EST		0	Thunderstorm Wind (MG 70 kt)
	11/17/13 16:08 EST		0	Source: Trained Spotter
A trained spotter reported several trees and tree limbs down.				
<b>NOBLE COUNTY --- ALBION [41.40, -85.42]</b>				
	11/17/13 16:08 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 16:09 EST		0	Source: Public
The public reported several trees down in the area, plus some damage to a local car wash.				
<b>ALLEN COUNTY --- 1.3 WNW WAYNE DALE [41.03, -85.20]</b>				
	11/17/13 16:10 EST		0	Thunderstorm Wind (EG 52 kt)
	11/17/13 16:11 EST		0	Source: Trained Spotter
A trained spotter estimated wind gusts to 60 mph with tree limbs of unknown soze blown down in the area.				
<b>HUNTINGTON COUNTY --- 1.3 ESE WARREN [40.67, -85.41]</b>				
	11/17/13 16:10 EST		0	Thunderstorm Wind (MG 51 kt)
	11/17/13 16:11 EST		0	Source: Mesonet
A mesonet station recorded a 59 mph wind gust.				
<b>WELLS COUNTY --- 0.7 N BLUFFTON [40.74, -85.17]</b>				
	11/17/13 16:15 EST		0	Thunderstorm Wind (MG 51 kt)
	11/17/13 16:16 EST		0	Source: Trained Spotter
A trained spotter reported a 59 mph wind gust.				
<b>WELLS COUNTY --- 4.0 NNW UNIONDALE [40.88, -85.27]</b>				

## Storm Data and Unusual Weather Phenomena - November 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	11/17/13 16:15 EST		0	Thunderstorm Wind (MG 56 kt)
	11/17/13 16:16 EST		0	Source: Mesonet
A mesonet station recorded a wind gust to 64 mph.				
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<b>ALLEN COUNTY --- 2.3 ENE (FWA)BAER FLD FT WAY [40.99, -85.14]</b>				
	11/17/13 16:17 EST		0	Thunderstorm Wind (EG 65 kt)
	11/17/13 16:18 EST		0	Source: Trained Spotter
A trained spotter reported three pole barns were destroyed with a grain silo having its top removed at the intersection of Ferguson and Thiele Roads.				
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<b>NOBLE COUNTY --- 1.6 E WAKEFIELD VLG [41.47, -85.22]</b>				
	11/17/13 16:17 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 16:18 EST		0	Source: Emergency Manager
Emergency management officials reported severe structural damage to a residence.				
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<b>WELLS COUNTY --- 2.1 S VERA CRUZ [40.67, -85.08]</b>				
	11/17/13 16:17 EST		0	Thunderstorm Wind (MG 55 kt)
	11/17/13 16:18 EST		0	Source: Trained Spotter
A trained spotter reported wind gusts to 63 mph along with power outages.				
<hr/>				
<b>ALLEN COUNTY --- 0.5 E NEW HAVEN [41.07, -85.01]</b>				
	11/17/13 16:22 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 16:23 EST		0	Source: Public
The public reported several trees down.				
<hr/>				
<b>ALLEN COUNTY --- 0.7 N FT WAYNE [41.08, -85.13]</b>				
	11/17/13 16:25 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 16:26 EST		0	Source: Amateur Radio
Amateur radio operators reported a 24 foot trailer overturned on Interstate 469, west of State Route 1. Trees were also blown down in the area.				
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<b>STEBEN COUNTY --- ANGOLA [41.63, -85.00]</b>				
	11/17/13 16:25 EST		0	Thunderstorm Wind (EG 56 kt)
	11/17/13 16:26 EST		0	Source: Emergency Manager
Emergency management officials reported multiple structures were damaged in Pleasant Lake. Power lines were blown down across the area as well. Winds estimated to 65 mph.				
<hr/>				
<b>ADAMS COUNTY --- DECATUR [40.83, -84.93]</b>				
	11/17/13 16:26 EST		0	Hail (1.00 in)
	11/17/13 16:27 EST		0	Source: Trained Spotter
A trained spotter reported quarter size hail.				
<hr/>				
<b>ADAMS COUNTY --- DECATUR [40.83, -84.93]</b>				
	11/17/13 16:26 EST		0	Thunderstorm Wind (EG 52 kt)
	11/17/13 16:27 EST		0	Source: Trained Spotter
A trained spotter reported wind gusts of at least 60 mph.				
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<b>ALLEN COUNTY --- 1.4 S MONROEVILLE [40.95, -84.87]</b>				
	11/17/13 16:32 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 16:33 EST		0	Source: Law Enforcement
Law enforcement officials reported two-thirds of a roof from a 140 foot hog barn was blown off.				
<hr/>				
<b>ADAMS COUNTY --- 0.9 SE GENEVA [40.59, -84.96]</b>				

## Storm Data and Unusual Weather Phenomena - November 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	11/17/13 16:50 EST		0	Thunderstorm Wind (MG 56 kt)
	11/17/13 16:51 EST		0	Source: Trained Spotter

A trained spotter reported wind gusts to 64 mph.

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### JAY COUNTY --- PORTLAND [40.43, -84.98]

11/17/13 16:55 EST	0	Thunderstorm Wind (EG 55 kt)
11/17/13 16:56 EST	0	Source: Emergency Manager

Emergency management officials reported some trees and tree limbs were blown down across portions of the county. Reports of leaning power poles were also received.

Deep low pressure moved across the northern Great Lakes, with a strong cold front trailing well south into Arkansas. A 50 to 60 knot low level jet aided in advecting in dewpoints greater than 60 degrees. 0-1km storm relative helicity values of 400 to 600 m2/s2 setup the perfect environment for individual thunderstorms to rapidly rotate. Numerous circulations were noted during the event, some significant, which produced swaths of wind damage as well as several weak to strong tornadoes. Given forward speed of 60 mph or more, the convection quickly translated across the area in a matter of hours.

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### (IN-Z004) ST. JOSEPH, (IN-Z014) MARSHALL

11/26/13 23:00 EST	0	Lake-Effect Snow
11/27/13 20:00 EST	0	

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### (IN-Z005) ELKHART

11/26/13 23:00 EST	0	Winter Weather
11/27/13 20:00 EST	0	

A band of heavy lake effect snow affected portions of north-central Indiana on November 27th. Snowfall totals of 5 to 10 inches occurred in a narrow band across St. Joseph County into northern Marshall County, with lighter snows on the periphery of this band.

## MICHIGAN, Extreme Southwest

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### (MI-Z077) BERRIEN

11/12/13 00:00 EST	0	Lake-Effect Snow
11/12/13 13:00 EST	0	

An intense lake effect snow band set up over far southwest Lower Michigan during the morning hours of November 12th. Localized snowfall totals in excess of a foot were common.

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### BERRIEN COUNTY --- 0.7 S STEVENSVILLE [42.01, -86.52]

11/17/13 14:55 EST	0	Thunderstorm Wind (EG 60 kt)
11/17/13 14:56 EST	0	Source: Public

The public reported multiple trees were blown down on Red Arrow Highway. A tree was also down onto a local residence.

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### CASS COUNTY --- 2.1 N LA GRANGE [41.98, -86.05]

11/17/13 15:25 EST	0	Thunderstorm Wind (EG 50 kt)
11/17/13 15:26 EST	0	Source: Trained Spotter

A trained spotter found tree limbs down. Damage to a building was reported by the spotter, but no details were given on the amount of damage.

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### CASS COUNTY --- 1.5 WSW PARK SHR RESORT [41.90, -86.01], 1.2 W PARK SHR RESORT [41.90, -86.00]

11/17/13 15:27 EST	0	Tornado (EF1, L: 0.38 mi , W: 50 yd)
11/17/13 15:29 EST	0	Source: NWS Storm Survey

A survey of damage in the Cassopolis area by a NWS Survey team revealed that a EF1 tornado produced damage along a roughly four tenths of a mile path. Touchdown occurred on the southern outskirts of Cassopolis at a farm where a older two story barn was severely damaged with the entire second story of the barn being destroyed with damage thrown upward of 200 yards downstream (DI: SBO DOD 8). The tornado continued quickly northeast, passing across the northwestern part of the Ross Beatty Jr./Sr. High School property and impacting a detached two car garage, causing its total destruction (DI: SBO DOD: 6). Debris was thrown up to 500 yards northeast from the point of impact onto the Park Shore Golf Course, where several trees were snapped or uprooted. Maximum wind speeds with the tornado are estimated at 110 mph.

## Storm Data and Unusual Weather Phenomena - November 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>CASS COUNTY --- 1.5 NNW JONES [41.92, -85.81]</b>				
	11/17/13 15:33 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 15:34 EST		0	Source: Trained Spotter
A trained spotter reported seven power poles were snapped. Other damage included the roof torn off a small shed and several center pivots being damaged. A snowmobile trailer was lifted and then tossed 100 yards.				
<b>ST. JOSEPH COUNTY --- CENTREVILLE [41.92, -85.53]</b>				
	11/17/13 15:51 EST		0	Thunderstorm Wind (EG 55 kt)
	11/17/13 15:52 EST		0	Source: Public
The public reported trees and power lines down throughout the entire county.				
<b>BRANCH COUNTY --- 1.2 SW UNION CITY [42.06, -85.15]</b>				
	11/17/13 16:10 EST		0	Thunderstorm Wind (EG 60 kt)
	11/17/13 16:11 EST		0	Source: Public
The public reported several trees down near Union Lake.				
Deep low pressure moved across the northern Great Lakes, with a strong cold front trailing well south into Arkansas. A 50 to 60 knot low level jet aided in advecting in dewpoints greater than 60 degrees. 0-1km storm relative helicity values of 400 to 600 m2/s2 setup the perfect environment for individual thunderstorms to rapidly rotate with the lower values into far southern Lower Michigan. While favorable conditions existed, the area was just far enough north of the best conditions to keep the most severe weather away. However, isolated wind damage and one tornado was reported.				
<b>(MI-Z077) BERRIEN, (MI-Z078) CASS</b>				
	11/26/13 23:00 EST		0	Lake-Effect Snow
	11/27/13 20:00 EST		0	
A band of heavy lake effect snow impacted portions of southwest Lower Michigan on November 27th. Snowfall totals of 8 to 16 inches occurred in a narrow band across eastern Berrien County and far western Cass County.				
<b>OHIO, Northwest</b>				
<b>VAN WERT COUNTY --- 0.5 W VAN WERT [40.87, -84.58]</b>				
	11/17/13 16:42 EST		0	Thunderstorm Wind (MG 54 kt)
	11/17/13 16:43 EST		0	Source: Mesonet
A 62 mph wind gust was recorded at the Van Wert Middle School.				
<b>DEFIANCE COUNTY --- 1.7 WNW THE BEND [41.29, -84.55]</b>				
	11/17/13 16:47 EST		0	Thunderstorm Wind (EG 65 kt)
	11/17/13 16:48 EST		0	Source: Emergency Manager
Emergency management officials reported a CSX crossing gate was broken by the high winds. In addition, a power pole fell onto a house and car.				
<b>VAN WERT COUNTY --- 2.0 NW WETSEL [40.97, -84.46], 2.6 N WETSEL [40.99, -84.42]</b>				
	11/17/13 16:47 EST		0	Tornado (EF1, L: 2.14 mi , W: 150 yd)
	11/17/13 16:49 EST		0	Source: NWS Storm Survey
A survey of damage in the northeastern part of Van Wert county by county emergency management officials and a NWS Survey team revealed that a EF1 tornado produced damage along a roughly two and one tenth mile long path. Touchdown occurred south of the intersection of Elm Sugar and Donner Road where several barns on two adjacent properties suffered damage. The northern most barn suffered extensive roof damage and loss of trusses (DI: SBO DOD: 4) with other barns suffering partial roof damage. The tornado continued northeast across open fields and occasional wooded areas, causing sporadic tree damage. A horse trailer was flipped over onto a truck at a residence on Middle Point Wetzel Road with a barn suffering minor roof damage. The tornado reached its end point at a business where some travel campers were flipped and some metal roofing was damaged. Maximum wind speeds with the tornado are estimated at 100 mph.				
<b>VAN WERT COUNTY --- 0.5 W WETSEL [40.95, -84.44]</b>				

## Storm Data and Unusual Weather Phenomena - November 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	11/17/13 16:50 EST		0	Thunderstorm Wind (EG 50 kt)
	11/17/13 16:51 EST		0	Source: Emergency Manager

Emergency management officials reported three campers were rolled and several others knocked off their bases at a storage area. Power lines were also reported down in the area.

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### PUTNAM COUNTY --- 3.5 WNW DOUGLAS [40.96, -84.39], 2.6 WNW MUNTANNA [40.99, -84.34]

11/17/13 16:52 EST	0	Tornado (EF2, L: 3.05 mi , W: 440 yd)
11/17/13 16:54 EST	0	Source: NWS Storm Survey

Damage consistent with a tornado touchdown was found by a NWS survey team. The tornado touched down at a residence on Township Road 0, west of County Road 27 where a barn suffered some structural damage, with several hay wagons thrown or moved. The tornado continued rapidly northeast, impacting another barn on Route 66, north of Road N. The barn suffered more extensive damage with both wood rafters and lots of rood sheeting being torn off and carried through a field for nearly a mile. The tornado crossed the Putnam/Paulding county line near the intersection of Road 12 and Road 25m.

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### PAULDING COUNTY --- 2.1 SSE MANDALE [40.99, -84.34], 2.1 SSE MANDALE [40.99, -84.34]

11/17/13 16:54 EST	0	Tornado (EF2, L: 0.02 mi , W: 440 yd)
11/17/13 16:55 EST	0	Source: NWS Storm Survey

A tornado which originally touched down in Putnam county briefly crossed into Paulding county, near the intersection of Road M and Road 25m. A mobile home near the county line was impacted by the tornado, causing it to shift off its foundation with minor siding damage (DI: MHSW, DOD: 3). A barn also suffered some minor siding damage. The tornado quickly re-entered Putnam county shortly after.

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### PUTNAM COUNTY --- 2.6 WNW MUNTANNA [40.99, -84.34], 2.6 SSW KIEFERVILLE [41.07, -84.23]

11/17/13 16:55 EST	0	Tornado (EF2, L: 8.04 mi , W: 440 yd)
11/17/13 17:03 EST	0	Source: NWS Storm Survey

A tornado that originally touched down in Putnam county briefly crossed the Putnam/Paulding county line before re-entering Putnam county where is continued its rapid northeastward track over mainly open fields until entering the town of Cloverdale. Extensive tree damage as well as minor to moderate structural damage was noted across the town, with several power poles down. The greatest damage occurred to a church and a brick home. Both suffered extensive damages to some of the walls and the roof (DI: FR12 DOD: 7). A nearby home lost one of its walls (DI:FR12, DOD2) with adjacent hardwood trees suffering greater damage (DI: TH DOD: 4). The tornado exited town and continued northeast for several more miles over open fields and occasional wooded areas with sporadic tree damage noted until finally lifting five miles northeast of Cloverdale. Maximum winds are estimated at 130 mph with a total two county path length of around 11 miles.

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### PAULDING COUNTY --- 0.7 N MANDALE [41.03, -84.35]

11/17/13 16:59 EST	0	Thunderstorm Wind (EG 55 kt)
11/17/13 17:00 EST	0	Source: Emergency Manager

Emergency management officials reported a trailer was destroyed on Township Highway 48, east of State Route 66.

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### DEFIANCE COUNTY --- 0.7 N DEFIANCE MEML ARPT [41.34, -84.43]

11/17/13 17:00 EST	0	Thunderstorm Wind (MG 52 kt)
11/17/13 17:01 EST	0	Source: ASOS

A 60 mph wind gust was recorded by the automated sensor at the Defiance airport.

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### FULTON COUNTY --- 1.7 ESE PETTISVILLE [41.52, -84.19]

11/17/13 17:15 EST	0	Thunderstorm Wind (MG 57 kt)
11/17/13 17:16 EST	0	Source: Mesonet

A mesonet station recorded a 66 mph wind gust.

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### HENRY COUNTY --- 3.1 E TEXAS [41.42, -83.89]

11/17/13 17:22 EST	0	Thunderstorm Wind (EG 60 kt)
11/17/13 17:23 EST	0	Source: Emergency Manager

Emergency management officials reported a semi was overturned by the strong winds on US 24, near the Henry/Lucas county line. Numerous reports of trees and power lines being blown down were received across the county.

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### ALLEN COUNTY --- 0.5 W CAIRO [40.83, -84.09]

11/17/13 17:31 EST	0	Thunderstorm Wind (MG 54 kt)
11/17/13 17:32 EST	0	Source: Mesonet

## Storm Data and Unusual Weather Phenomena - November 2013

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
A 62 mph wind gust was recorded by a mesonet station.				
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ALLEN COUNTY --- 0.9 SW LIMA [40.74, -84.11]	11/17/13 18:00 EST		0	Thunderstorm Wind (MG 55 kt)
	11/17/13 18:01 EST		0	Source: Mesonet

A mesonet station recorded a 63 mph wind gust.

Deep low pressure moved across the northern Great Lakes, with a strong cold front trailing well south into Arkansas. A 50 to 60 knot low level jet aided in advecting in dewpoints greater than 60 degrees. 0-1km storm relative helicity values of 400 to 600 m2/s2 setup the perfect environment for individual thunderstorms to rapidly rotate. Numerous circulations were noted during the event, some significant, which produced swaths of wind damage as well as several weak to strong tornadoes. Given forward speed of 60 mph or more, the convection quickly translated across northwestern Ohio over a few hour period.